

The ARCS Model of Motivational Design

The ARCS Model of Motivational Design by Keller (1983) is being used as a rationale for this game design protocol as it relates well to the steps needed to get students involved and learning. The game is intended to create the following:

ATTENTION

strategies for arousing and sustaining curiosity and interest

(Keller, 1983)

game intended to create 'attention' by using colorful storyline

storyline with dungeons & dragons concept of an old 'sanctum'

a secret treasure (D2L LMS) is hidden & protected by some dastardly creatures

game can be frustrating/challenging, but that is part of the fun of learning > to overcome the difficulties & WIN!

RELEVANCE

strategies that link to learners' needs, interests, and motives

(Keller, 1983)

game strategies 'relevant' to instructors' needs, interests, & motives to learn D2L

these strategies are for own subject development & desire to have their students learn

CONFIDENCE

strategies that help students develop a positive expectation for successful achievement

(Keller, 1983)

instructors (as students) successfully achieve their goals via 'confidence' strategies

these strategies include available tutorials & 'easier paths' if players aren't able to walk through the front door

SATISFACTION

strategies that provide extrinsic and intrinsic reinforcement for effort

(Keller, 1983)

instructors receive extrinsic reinforcement as able to learn how to navigate in D2L & create tests

game is a challenging 'fun' way to learn while playing = intrinsic reinforcement

The Seven C's of Learning

Richardson's (2007) Seven C's of Learning provide an opportunity for application of a number of the 7 C's related to learning.



Learning Principles

Gee (2007) has presented us with a group of 'Learning Principles'. The rationale for design includes in this case, an analysis of learning principles that are relevant to this game prototype. Thus, not all 36 (Gee lists 36 Learning Principles) will be referenced. We see a number of the principles as part of our experience and as part of our game design.

#2: Design Principle

- We have learned a great deal about game design & have come to appreciate the design & design principles as part of the learning experience. Even though it takes up an inordinate amount of time to create a game, it is quite frankly 'fun' and quite challenging. We believe the same can be said for engaging learners in this process. This fits well with the concept of Learner Centred Design. As Gee (2007) argues, "Learning about and coming to appreciate design and design principles is core to the learning experience" (p. 41).

#3: Semiotic Principle

- The work of creating a game and/or a prototype lends itself to experiencing the interrelationships of complex systems such as the use of images, text, activities, symbolism, and neat little and big artifacts. According to Gee, "Learning about and coming to appreciate interrelations within and across multiple sign systems (images, words, actions, symbols, artifacts, etc) as a complex system is core to the learning experience" (p. 42).

#6: Psychosocial Moratorium Principle

- The creator(s) of a game can take risks in developing and playing the game as the consequences are lessened. That is not to say that having a glitch in the development arena is totally fun but with persistence it usually can be overcome. This same principle applies to the players of the game as you may not make it the first time but you can always come back and try again. Again, Gee (2007) argues that "A learning space in which the learner can take risks where real-world consequences are lowered" (p. 59) creates a place where low cost of failure and high reward for success can occur (p. 59).

#20: Multimodal Principle

- This can apply to both the creator of a game and for a student playing the game or modding it for other purposes. The very interaction of working through and with a variety of modalities (visuals, text, interactions, audio, abstract design) builds knowledge and meaning. Gee (2007) also contends that "Meaning and knowledge are built up through various modalities (images, words, symbols, interactions, abstract designs, sounds, etc.), not just words (p. 110).

28: Discovery Principle

- This applies to how the programmers understand the concepts to be able to develop the game in such a fashion that the players of the game don't get overt (this is how you do everything in the game) sets of expressions. The information is available in tutorials, hints, and obvious symbolism. The players are given many opportunities to experiment and make their own discoveries. There are always options for a player to take a different path (some might call it easier as it has more clues and obvious helping 'hands'. In addition, Gee maintains that "Overt telling is kept to a well-thought-out minimum, allowing ample opportunity for the learner to experiment and make discoveries" (2007, p. 142).